

LETTERS TO THE EDITOR

Heterosexual transmission of HBV in Caucasians attending a genitourinary medicine clinic

Heterosexual transmission of the hepatitis B virus (HBV) has emerged as a major transmission route in the USA and Europe.^{1,2} These reports prompted us to study our patients, a group of young sexually active persons.

One hundred consecutive non-drug injecting Caucasian heterosexuals attending a genitourinary medicine clinic were studied. Caucasian patients were selected to reduce the likelihood of vertical or horizontal transmission of HBV. Seventy two patients were females, age range 18-41 years, mean 26 and 28 males, age range 21-45 years, mean 32.9. Serum samples from each patient were screened for HBsAg, anti HBs, anti HBc and samples positive for HBsAg were screened for HB e Ag.

In two patients serological evidence of HBV infection was detected. Neither was of UK origin. One patient, an Australian female theatre nurse, was found to be HB e Ag positive. She had acquired acute HBV from her Australian ex-husband five years previously. The patient was sexually active, claiming to have had two partners in the last 3 months. She admitted to vaginal intercourse only, without using condoms. The other patient, a white Zimbabwean male was found to be anti HBs and anti HBc positive. No definite source of infection was identifiable. He had had unprotected sexual intercourse with four white females whilst living in Zimbabwe and his lifetime number of partners was eight.

No serological evidence of prior exposure to HBV was found in any other patient—including any of the 67 patients of UK origin. None of the sexual partners of the patients who demonstrated serological evidence of HBV came forward for screening.

Overall the lifetime exposure to sexually transmitted infections in the 100 patients was high—see table. The female patient found to be HB e Ag positive had vaginal candida, with no prior sexually transmitted disease. The male patient had no evidence of present or prior sexually transmitted disease. Acquisition of sexually transmitted infections has been observed to be a risk factor for acquisition of HBV in the USA and Europe.^{1,2}

Two control populations were studied. The first was a sex and age matched population of Caucasian army recruits. The second was a sex and age matched

Table Lifetime sexually transmitted diseases in 100 consecutive Caucasian non-drug injection heterosexuals attending a genitourinary medicine clinic

<i>Candida albicans</i>	40
Anaerobic vaginosis	16
<i>Trichomonas vaginalis</i>	4
Non specific urethritis	}
Chlamydia	
Contacts of non-specific urethritis	
Pelvic inflammatory disease	
	30
<i>Neisseria gonorrhoeae</i>	4
Herpes simplex virus	3
Condylomata acuminata	10
Scabies	20
Syphilis	2
HIV*	0
(Hepatitis B)	1
	2)

*HIV antibody screening was only performed at the patient's request, with pre and post test counselling.

population of Caucasian army personnel. No serological evidence of HBV infection was found in either of the control groups. There were 100 subjects in each control group.

In conclusion this study, although limited in size, has demonstrated evidence that heterosexual non-drug injecting caucasians attending a genitourinary medicine clinic in London have a small but definite likelihood of prior infection with HBV. The incidence of HBV markers was higher than in the control groups. The seroprevalence of 2% in the genitourinary medicine cohort, and nil in the persons of UK origin is similar to the 4% and 0.9% respectively reported in 1987 from a neighbouring clinic,³ suggesting local stability of heterosexual transmission rates.

The Public Health Laboratory Service, although reporting a decrease in the numbers of cases of acute hepatitis B each year from 1985 to 1988, reports an increasing proportion of cases acquired abroad. It is also important to note that the largest group acquiring acute HBV have no discernable risk factor.⁴

To prevent new cases of HBV, vaccination must be offered prior to potential exposure. Our data suggest that heterosexual transmission of hepatitis B does need continued careful monitoring. In particular, the risk of hetero-sexual acquisition of HBV abroad needs assessing. Only when the sources of infection in our patients are better understood can vaccination strategies be planned.

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- 1 Alter MJ, Hadler SC, Margolis HS, *et al.* The changing epidemiology of hepatitis B in the United States. Need for alternative vaccination strategies. *JAMA* 1990;263:1218-22.
- 2 Mele A, Franco E, Caprilli F, *et al.* Hepatitis B and Delta virus infection among heterosexuals, homosexuals and bisexual men. *Eur J Epidemiol* 1988;4:488-91.
- 3 Evans BA, McCormack SM, Bond RA, MacRae KD, Thorp RW. Human immunodeficiency virus infection, hepatitis B virus infection, and sexual behaviour of women attending a genitourinary medicine clinic. *BMJ* 1988;296:473-5.
- 4 Polakoff S. Acute viral hepatitis B, reported to the Public Health Laboratory Service. *J Infect* 1990;20:163-8.

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Comparison of ofloxacin with oxytetracycline in the treatment of non-gonococcal urethritis in men

Ofloxacin has been shown to be effective in the treatment of genital infections due to *Chlamydia trachomatis* and in non-gonococcal urethritis (NGU).¹⁻³ We conducted a study to compare the efficacy of ofloxacin against oxytetracycline in the treatment of NGU.

New and re-booked males with NGU, who attended the Department of Genitourinary Medicine at the Bristol Royal Infirmary were recruited. Those who had received antibiotics in the preceding two months were excluded. Routine samples were taken for the detection of *Neisseria gonorrhoeae* and *C. trachomatis*. Patients were randomly allocated to receive either ofloxacin 400 mg once daily for ten days or oxytetracycline 250 mg four times daily for ten days. They were reassessed 14 and 21 days after initiation of therapy for clinical cure of urethritis.

Of the 265 men with NGU, 127 were treated with ofloxacin while 138 received oxytetracycline. Age, number of sexual partners in the preceding six months and condom use were similar in both groups.

Twenty-four men in the ofloxacin group and 36 in the oxytetracycline group were not assessable because of either default or sexual intercourse, during the follow-up period. Chi square test was used for statistical analysis. The results are summarised in the table.

Our study has shown that clinical cure rates for NGU did not differ significantly between the treatment groups. This is in agreement with previous studies which have compared ofloxacin with doxycycline^{1,2} and erythromycin.³ Moreover, cure rates were not significantly different between the two antibiotics, for chlamydia-positive and chlamydia-negative NGU. Patients tolerated ofloxacin well and found the single dose regimen convenient.

We conclude that ofloxacin is a safe and effective alternative in the treatment of non-gonococcal urethritis in men.

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- 1 Kitchen VS, Donegan C, Ward H, *et al.* Comparison of ofloxacin with doxycycline in the treatment of non-gonococcal urethritis and cervical chlamydial infection. *J Antimicrob Chemother* 1990;26 (Suppl):99-105.
- 2 Boslego JW, Hicks CB, Greenup R, *et al.* A prospective randomised trial of ofloxacin vs doxycycline in the treatment of uncomplicated male urethritis. *Sex Transm Dis* 1988;15:186-91.
- 3 Moller BR, Herrmann B, Ibsen HHW, *et al.* Occurrence of *Ureaplasma urealyticum* and *Mycoplasma hominis* in non-gonococcal urethritis before and after treatment in a double blind trial of ofloxacin vs erythromycin. *Scand J Infect Dis* 1990;22/68 (Suppl):31-4.

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Table Clinical cure in men with NGU

	Ofloxacin	Oxytetracycline	
Chlamydia-positive NGU	35/44 (79.5%)	33/37 (90.2%)	p > 0.1
Chlamydia-negative NGU	50/59 (84.7%)	57/65 (87.6%)	p > 0.5
Total	85/103 (82.5%)	90/102 (88.2%)	p > 0.1

Location of district genitourinary clinic: hospital or community site?

The NHS and Community Care Act 1990 emphasises the provision of health care sensitive to patient's needs; consumers' views are increasingly being sought in many areas of the health service including genitourinary medicine (GUM).¹ For the management of sexually transmitted diseases GUM

specialists require access to a microbiological laboratory and may need to consult with other clinical colleagues including gynaecologists and surgeons. The main GUM clinic should, therefore, be situated within the district general hospital. Such a site becomes important as the number of AIDS cases, with their requirements for inpatient care and access to diagnostic and therapeutic services, increase. However, as immediate access to a laboratory or